

FIG. 1 (a)

Fig. 1 (b)
prior art

SUBSTRATE (10)

| SUBSTRATE (10) | INTER CONNECT METAL (3) |
| REMOVABLE) (6) | USM TITANUM DAN (12) |
| SOLDER AFTER WETBACK(A) |
| TEMPORARY LAYER | SOLDER AFTER WETBACK (A) |
| PHOTOPRES | SOLDER (8) |
| PATING MEMBERANE + NON-WETBACK DAN (7) |
| ANN-WETBACK DAN (7) |
| PAR (5) T. N. A.) | SUBSTRATE (1) |
| INSULATING FILM (OPTOMAL) (4) |
| MIRICANNAT | OF POLYIMIDE (9) | T. PY AU) |
| (3)

Fig 2

metal band (7a)
(Solder dam)

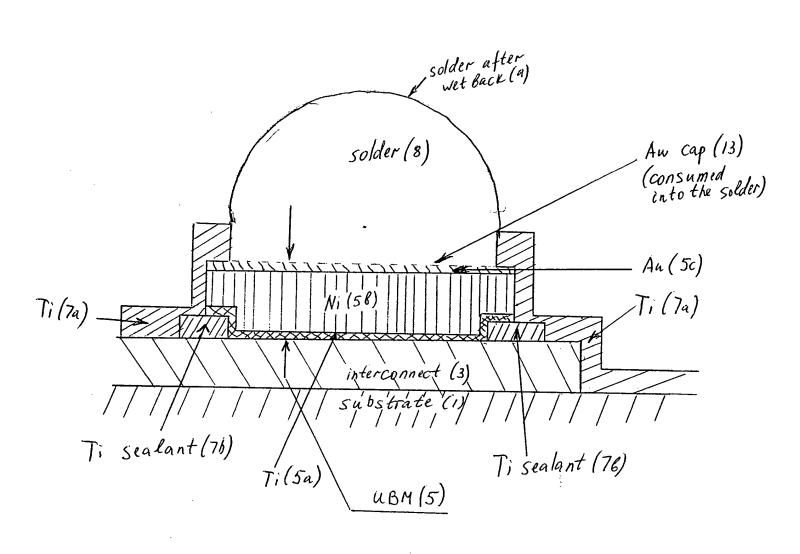
interconnect metal (3)

solder bump

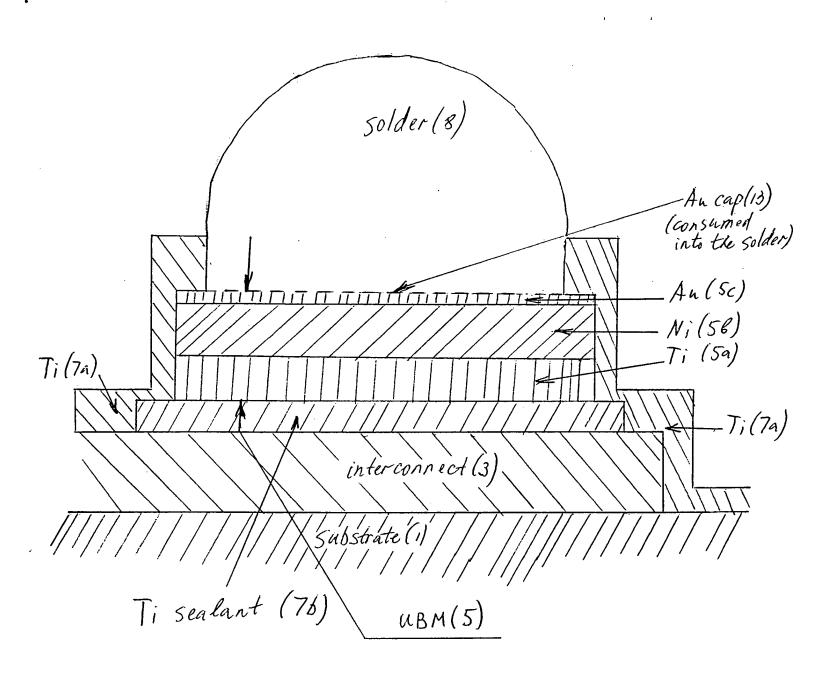
after heating /wet back (9)

Fig 2(a)

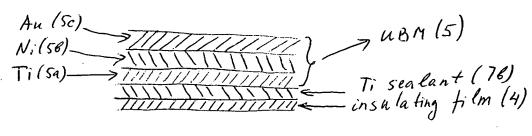
Fig. 2(6)



Fif. 3



Fi6 3 (a)



FIE 3(8)

solder (8) solder westable cap layer (Sc) diffusion barrier loyer (Sb) -adhesion improvement layer (Sa) UBM (5 interconnect (3) substrate, (1) plating membrane and non wettable dam (7) Fig. 4 Ze-Cr (plating membrane 7) Fig. 4(a) ENi (plating membrane (7) Fig 4(6) 1/1/2 Cr 7 plating membrane (7) Fig 4(c) Oxidizals; Left ? plating membrane (7) Fig 4(d)